

CLAIM SUMMARY DOCUMENT

1. (Canceled)
2. (Currently Amended): ~~Brake~~ The brake application system according to Claim ~~1~~ 22, ~~characterized in that, for the electric actuating,~~ including an electric drive unit ~~(10) is provided~~ which consists of an electric motor ~~(12)~~ with a gearing ~~(14)~~ arranged on the output side, and the gearing output of the gearing ~~(14)~~ being is rotationally coupled with the electrically actuated ~~driven~~ screw part ~~(4)~~.
3. (Currently Amended): ~~Brake~~ The brake application system according to Claim 2, ~~characterized in that~~ wherein the electric motor comprises a d.c. motor ~~(12)~~, and the gearing comprises a planetary gearing ~~(16)~~ axially adjoining the electric motor as well as one or more gearwheel stages ~~(18)~~ arranged on its output side.
4. (Currently Amended): ~~Brake~~ The brake application system according to Claim 3, ~~characterized in that~~ including a clutch ~~(52) is provided~~ which is arranged in front of the electric drive unit ~~(10)~~ of the one screw part ~~(4)~~, by means of ~~which the~~ clutch ~~(52)~~, in the event of the presence of an axial force originating from a braking, the electrically actuated ~~driven~~ screw part ~~(4)~~ can be non-rotatably coupled with a non-rotatable part ~~(24)~~ and can otherwise be uncoupled from the ~~latter~~ non-rotatable part.
5. (Currently Amended): ~~Brake~~ The brake application system according to Claim 4, ~~characterized in that~~ wherein the clutch ~~is formed by~~ includes a cone clutch ~~(52)~~ having at least two conical surfaces ~~(56, 58)~~ which can be stopped as a function of friction against one another and are arranged obliquely viewed in the effective direction of the axial force.
6. (Currently Amended): ~~Brake~~ The brake application system according to Claim 5, ~~characterized in that~~ wherein one of the conical surfaces ~~(56)~~ is constructed on a housing ~~(24)~~ and the other conical surface ~~(58)~~ is constructed on a

conical sleeve (36)-non-rotatably connected with the electrically ~~actuated~~-driven screw part-(4).

7. (Currently Amended): ~~Brake~~-The brake application system according to Claim 6, ~~characterized in that~~including a threaded pin (50)-of the electrically ~~actuated~~-driven screw part (4)-is-screwed into an internal thread constructed in a bottom of the conical sleeve-(36).

8. (Currently Amended): ~~Brake~~-The brake application system according to Claim 7, ~~characterized in that~~including a gearwheel (30)-meshing with a gearing-output-side gearwheel (28)-of the gearing (14)-isand being coaxially rotatably disposed on a cylindrical projection (34)-of the conical sleeve-(36).

9. (Currently Amended): ~~Brake~~-The brake application system according to Claim 8, ~~characterized in that~~including a sliding-slip clutch (38)-is-arranged between the electric drive unit (10)-and the electrically ~~actuated~~-driven screw part-(4), ~~which-sliding~~and the slip clutch (38)-is constructed to be slipping when stop positions have been reached and is otherwise coupling.

10. (Currently Amended): ~~Brake~~-The brake application system according to Claim 9, ~~characterized in that~~wherein one stop position is formed by the application of the brake pads to the brake disc and another stop position is formed by a screwing end position, in which the electrically ~~actuated~~-driven screw part-(4) is screwed into the other screw part (8)-to the stop, or vice-versa.

11. (Currently Amended): ~~Brake~~-The brake application system according to Claim 10, ~~characterized in that~~wherein the sliding-slip clutch (38)-is arranged between the cone clutch (52)-and the electric drive unit-(10).

12. (Currently Amended): ~~Brake~~-The brake application system according to Claim 11, ~~characterized in that~~wherein the sliding-slip clutch (38)-contains balls (40)-pretensioned by defined spring pressure in grooves, the grooves being

constructed on a face of the gearing-output-side gearwheel-(28), and the balls (40) being held in bores (42)-of a ring (44)-non-rotatably held on the cylindrical projection (46)-of the conical sleeve-(36).

13. (Currently Amended): ~~Brake-~~The brake application system according to Claim-12 ~~2~~, ~~characterized in that~~wherein, at least during the electric ~~actuating~~ driving of the one screw part (4)-in one rotating direction for the wear adjustment, the other screw part (8)-is held in a non-rotatable manner.

14. (Currently Amended): ~~Brake-~~The brake application system according to Claim 13, ~~characterized in that~~wherein the other screw part (8)-of the screw drive (2)-can be rotatorily driven for the emergency and/or auxiliary release of the brake.

15. (Currently Amended): ~~Brake-~~The brake application system according to Claim 14, ~~characterized in that~~wherein the other screw part (8)-is coupled with a rotary drive-(88; 112) for the emergency and/or auxiliary release by ~~means of an~~ an unlockable free wheel-(74)-~~which, on the one hand, and the unlockable free wheel~~ permits a rotation of the other screw part (8)-by ~~means of the rotary drive (88; 112)~~ in a direction against the wear adjustment and, ~~on the other hand,~~ is constructed for blocking this rotation if it is not caused by the rotary drive-(88; 112).

16. (Currently Amended): ~~Brake-~~The brake application system according to Claim 15, ~~characterized in that~~wherein the electric drive unit (10)-of the electrically ~~actuated-driven~~ screw part (4)-is actuated independently of the rotary drive (88; 112) of the other screw part-(8).

17. (Currently Amended): ~~Brake-~~The brake application system according to Claim 16, ~~characterized in that~~wherein the rotary drive (88; 112)-is designed to be remotely or electrically actuated directly by hand by ~~way of a Bowden cable~~.

18. (Currently Amended): ~~Brake-~~The brake application system according to Claim 17, ~~characterized in that~~wherein the other screw part (8)-is coupled by ~~way~~

of a ~~sliding slip~~ clutch (70) with the rotary drive (88; 112) and has an application surface (68) for the application of a rotating tool.

19. (Currently Amended): ~~Brake~~ The brake application system according to Claim ~~18~~ 22, ~~characterized in that~~ wherein the electrically ~~actuated~~ driven screw part is ~~formed by the~~ a threaded spindle (4), and the other screw part is ~~formed by the~~ a nut (8).

20. (Currently Amended): ~~Brake~~ The brake application system according to Claim ~~19~~ 15, ~~characterized in that~~ wherein the unlockable free wheel is ~~formed~~ as includes a ~~wrap-coil~~ spring free wheel (74) between a cylindrical wall (100) of a non-rotatable part (26) and a sleeve (72) rotating along with the ~~nut (8)~~ other screw part.

21. (Currently Amended): ~~Brake~~ The brake application system according to Claim 20, ~~characterized in that~~ including another free wheel (140) is ~~provided~~ between the drive unit (10) and a non-rotatable part (24) which permits only a rotation of the drive unit (10) in a direction in which the ~~thrust rod~~ brake actuator (1) is lengthened.

22. (New): A brake application system for vehicles, particularly for rail vehicles, comprising:

- a wear adjuster which is constructed as a brake actuator;
- a screw drive of the wear adjuster having a threaded spindle and a nut which can be screwed thereto as the screw parts; and
- at least one of the screw parts is electrically driven for the wear adjusting.